DEPARTMENT OF HEALTH & HUMAN SERVICES Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

TB Notes
No. 2, 1998

Dear Colleague:

Letters of solicitation for FY 1999 applications were sent in July to all current recipients of TB Elimination and Laboratory cooperative agreement funds. The FY 1999 appropriation for TB is expected to be the same as it was for this year. The deadline for submitting FY 1999 applications to the Procurement and Grants Office, CDC, is September 25. If you have questions or need assistance, please contact your respective area consultant in Field Services Branch.

On May 7-8, Dr. Bess Miller represented DTBE at a meeting with leaders in the international TB community. The purpose of the meeting, held at the World Health Organization (WHO) headquarters in Geneva, was to begin the initial planning of a global strategic plan to control TB. Other organizations represented at the meeting included the Global TB Programme of WHO, the Royal Netherlands TB Association, the American Lung Association, and the American Thoracic Society. The International Union Against TB and Lung Disease (IUATLD) is also participating in this process. The purpose of the plan will be to develop consensus on the approach to TB prevention and control and to develop a wider coalition of government ministries of health, nongovernmental organizations, and donor agencies supporting TB control programs. Carl Schieffelbein has also been instrumental in this activity, and along with Dr. Miller will participate as a member of the steering committee for the development of the plan. It is anticipated that the development and implementation of the plan will occur over the next 1 to 2 years.

On May 18-19, senior staff of the division attended a retreat at Callaway Gardens in Pine Mountain, Georgia. The goals of the retreat were to improve the ways in which we communicate with each other and with others outside the division, and to come up with ideas for more opportunities for collaboration between our branches. We came away with a deepened appreciation for the abundant richness of our resources, both human and technological. In follow-up to the retreat, consultants from Field Services Branch have been asked to attend other branch/activity meetings and thus enhance communications with state/local TB programs.

Dr. Bess Miller, Carl Schieffelbein, Harry Stern, Dr. Nancy Binkin, Dr. Helene Gayle, Dr. Harold Jaffe, Dr. Tim Dondero, Dr. Stephen Blount, and I participated in the BOTUSA program review June 1-5. The review team was assisted by Dr. Tom Kenyon, the BOTUSA project director, and Ethleen Lloyd, senior public health advisor with the BOTUSA project. The BOTUSA project has been made possible by a Memorandum of Understanding between CDC and the Botswana Ministry of Health. The review focused on hearing an update from the BOTUSA staff on progress in current studies, and on making strategic decisions about future research directions and ways to improve current project functioning, taking into account local priorities, findings to date, and the

evolving co-epidemics of TB and HIV.

The TB Program Managers Course was held in Atlanta June 15-19 at the Holiday Inn in Decatur. The course was attended by 28 participants, consisting of TB program managers, TB controllers, public health advisors, and nurse consultants. As with previous offerings, the course drew favorable responses and appreciative comments as to the usefulness of the material presented. Staff of the Communications and Education Branch, who are responsible for the course, are now tabulating the results of the evaluations for the sessions to facilitate further fine-tuning of the course.

The use of rifapentine for the treatment of TB has been approved by the Food and Drug Administration. This is the first new TB drug approved in more than 25 years. Also, the results of a number of "short-course" TB preventive therapy studies suggest that 2- or 3-month regimens containing rifampin may become suitable alternatives to longer courses of isoniazid. Next September 14-15, in collaboration with ATS, CDC is sponsoring an informal discussion of available data in order to issue recommendations on alternatives for preventive therapy. Please see Dr. Rick O'Brien's articles on these topics in this issue.

Two years ago, the Program Coordination Unit (PCU) was established as a pilot program in the Prevention Support Office of NCHSTP. The PCU was established as a result of the reorganization that consolidated CDC's HIV, STD, and TB prevention programs into our new Center. The intent was to test the feasibility of using single multiprogram project officers to provide support to and serve as contacts for state officials in all three programs. The pilot program was conducted in the following areas: Houston, San Francisco, Los Angeles, Texas, Florida, South Carolina, the District of Columbia, Rhode Island, and Vermont. The pilot program has now come to an end. Based on the experience gained in the project, NCHSTP is now in the process of redesigning the project officer system and developing a new plan for service delivery that should facilitate coordination and communication across all three program areas. Although the new system will not use a single project officer for all three program areas, it will retain those elements that were demonstrated to be the most effective and useful during the pilot project: consistency, good communication, improved coordination, and quality technical assistance. Dennis Christianson is now working in the National Center for Environmental Health; Nick Farrell is with CDC's Office of Global Health; and Cynthia Marshall has resigned from CDC in order to attend divinity school. Louis Salinas, who served as the chief of the Program Coordination Unit, has become the NCHSTP liaison with the U.S. Agency for International Development. Greg Andrews, chief of Field Operations Section II, Field Services Branch, DTBE, will be assuming the TB program duties of the former PCOs on an interim basis. DTBE has posted a vacancy announcement for one Program Consultant position to cover the nine sites for which the PCOs had been responsible. Dr. Patricia Simone, chief of Field Services Branch, DTBE, is currently working with her counterparts in NCHSTP to develop a plan for improved interdivisional communication and coordination.

The Institute of Medicine will be conducting an in-depth review and evaluation of the nation's progress towards TB elimination. Also, ACET is updating its 1989 document, *A Strategic Plan for the Elimination of Tuberculosis in the United States*. These plans dovetail with my desire to increase our efforts to reduce the burden of TB infection while maintaining high levels of performance with managing active cases and contacts. As we focus our efforts on elimination, it is essential that we advocate for and work towards the development of new tools against TB. In this context, ACET published the report "Development of new vaccines for tuberculosis" in the August 21 *Morbidity and Mortality Weekly Report* (*MMWR* 1998:47[No. RR-13]). Additionally, the National Vaccine Program Office sponsored a meeting on TB vaccine development August 26-27 in San Francisco.

As you can appreciate, we have regained much-needed momentum towards the elimination of TB from the United States. You form part of a unique group of persons whose efforts should ultimately help "make a difference."

Kenneth G. Castro, MD

In This Issue

NOTE: The use of trade names in this issue is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

TB Notes

Centers for Disease Control and Prevention
Atlanta, Georgia 30333

Division of TB Elimination ◆ National Center for HIV, STD, and TB Prevention

Number 2, 1998

HIGHLIGHTS FROM STATE AND LOCAL PROGRAMS

Maryland Tuberculin Skin Test Training: Successful Collaboration with a College Continuing Education Program

For many years, Maryland Division of TB Control program nurses provided tuberculin skin test (TST) training on an as-needed basis, using CDC materials. This approach raised concerns that TB control personnel were being distracted from other, higher priority TB control activities, and pointed out the need for a standardized curriculum, teaching methodology, and evaluation procedure. A 3½-hour TST training curriculum was developed consisting of the following components:

- Pretest
- Didactic overview using overheads, with copies provided to participants
- Practicum for placing skin tests on fellow participants and reading practice arms
- Case studies (which review the didactic material in the context of actual scenarios)
- Posttest

A course manual and instructor's manual were developed, and instructors for the TST training were identified and trained by the TB control program.

In 1996, administrative oversight and support for the program was sought via a contract with a local university school of nursing. Funds were provided to the school for basic costs. A nominal fee of $10 was charged to participants to help cover costs. Services included publicizing courses; providing a payment mechanism for the instructors; arranging for training sites, audiovisual equipment, and refreshments; and tabulating the course evaluation. In 1997, because of some problems with the contractor, we ended the contract and, since then, have satisfactorily contracted with Howard Community College Allied Health Continuing Education Program to provide the same services. Since 1996, over 400 participants have been successfully trained.

Course registration is limited to 20 participants with two instructors. In 1998, the unit cost per participant was $41. This cost was kept low by the use of free or low-cost state facilities identified by the TB program, as well as by the provision of the participant packets and materials for the practicum, in-kind, by the TB program. We plan to increase the cost for tuition to $25, and to continue to subsidize the course with CDC Cooperative Agreement funds. We strive to ensure that course tuition is not a barrier to participation.

Some of the lessons learned as this partnership has evolved:

1. *Don't underestimate the skill level needed for TST instructors.* We have

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found that while the basic material covered in the TST course is not difficult, instructors must be able to answer a broad range of questions related to TB. The instructors we selected are both nurses with advanced degrees and many years' experience with classroom and clinical teaching; they have backgrounds in hospital infection control and community health nursing education, respectively.

2. *Carefully evaluate the continuing education program experience of the college with which you are contracting.* We had an unsatisfactory experience contracting with a school of nursing whose continuing education program was undergoing internal transition and which had little experience with the kind of collaborative partnership we envisioned. If possible, carefully evaluate several continuing education programs prior to selecting one. Be sure that your primary contact at the college has decision-making authority.

3. *Define your target population.* We decided to limit our course to licensed health care professionals (registered nurses, physicians, licensed practical nurses, physician assistants) because we found that nonlicensed personnel require a far more basic course than we are offering. We are currently developing a separate course for nonlicensed personnel. Make sure you are providing instruction that falls within the scope of local laws and regulations. Clearly identify the target population in the course brochure.

4. *Carefully design criteria for successful completion of the course and reevaluate the criteria annually*. We have decided to require participants to demonstrate placement of at least two correctly applied intradermal tests (instead of one) and to pass a written posttest in order to receive a certificate of completion for the course.

5. *Clearly delineate responsibility of your program, as well as that of the instructors and of the college.* Administrative and financial responsibilities (frequency and type of financial reports) should be clearly spelled out in the memorandum of understanding.

For further information, contact Maureen Donovan or Sarah Bur at (410) 767-6698 (e-mail:bursara@dhmh.state.md.us).

—Reported by Sarah Bur, RN, MPH, Maureen Donovan, RN, MA, and Nancy Baruch, RN, MBA
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Division of TB Control, Refugee and Migrant Health

Kentucky's Response to an Outbreak with a Virulent Strain of *M. Tuberculosis*

Since 1994, Kentucky's Clinton County has seen a drastic increase in its TB case rate. Prior to 1994, Clinton County had reported few TB cases. Between 1987 and 1993, a total of just seven cases had been reported; during four of those years (1989 through 1992), zero cases were reported. In 1994 alone, seven new cases were reported, for a case rate of 76.0 per 100,000 population. Clinton County continues to experience a higher-than-average case rate.

Clinton County is a sparsely populated, rural area located along the Kentucky-Tennessee border. According to the Kentucky State Data Center, the 1996 population projection for Clinton County was 9,269. According to the 1990 census, the median household income for 1989 was $11,348. There is no home industry or main job source located in the county. A number of residents travel to other counties within Kentucky, or to Tennessee, to gain employment in regional factories.

Kentucky is divided into health districts. Currently, there are 41 designated TB health districts. Clinton County is one of the 10 counties within the Lake Cumberland Health District, one of the largest health districts in Kentucky in terms of number of counties served and territory covered. Lake Cumberland Health District has a TB Nurse Coordinator and an outreach worker who are responsible for TB control in all 10 counties. Their office is headquartered in Somerset, which is about an hour's distance from Clinton County.

In 1995, Epidemic Intelligence Service (EIS) officers from CDC were called on for assistance with an outbreak that was crossing the Kentucky-Tennessee border. The index case was working at a clothing factory in Tennessee, but lived in Kentucky. This particular case was found to have a higher-than-average transmission rate, presumably due, in part, to the strain of *M. tuberculosis* that has been determined to be very virulent. Since 1994, Clinton County has reported 28 cases, of which at least 17 were related to the outbreak strain.

What has this outbreak meant for Kentucky and for Clinton County? As this was an area that had a history of low TB rates, they did not have the resources needed to control TB on such a large scale. The local health department nurses worked under the direction of the TB coordinator in doing contact investigations and in attempting to perform DOT. These nurses have primary responsibility for other programs at the health department, so their time was very limited.

It has taken collaboration with the local health center, the district health department, the state TB program, and CDC for this small community with limited resources to implement the TB control measures needed to stem the outbreak. Over the past 2 years, resources have been specially allocated to help Clinton County control TB. Funds are now allocated to run a monthly TB clinic within the county. Once a month, the District

Medical Director operates the TB clinic to examine cases, suspects, and contacts. In 1997, CDC provided funds to hire a TB nurse and office assistant to work full time in TB at the Clinton County Health Department. The local health department has contracted with the local hospital to perform the chest x-rays and has developed a close relationship with the four local doctors and three pharmacies. The pharmacies are now reporting to the health department any person who receives a prescription for more than one anti-TB drug. It took some time for DOT to be accepted in the medical community. Now, every patient who has TB, or who is suspected of having TB, is placed on DOT. Children and high-risk individuals who are infected with TB are placed on DOPT. Even with added resources from the state and from CDC, at times it is still difficult managing TB control in this area. Available resources and materials that are taken for granted when one works in a larger urban area are not always available in a small community. For example, the Clinton County TB nurse had great difficulty locating dry ice in which to pack a patient's blood specimen, so that it could be sent to National Jewish for use in testing drug levels. It took a lot of phone calls and coordination from the nurse before the specimen was finally shipped.

Many of the people in the area who are identified with clinical TB have special needs. As this is a very rural area, many of the patients live in the country. A few of the patients did not have running water and several still live in run-down housing. One of the patients who was very ill was living alone in a very poorly maintained trailer, with no running water or air-conditioning, and boarded-up windows. The TB nurse cleaned the trailer, got someone to connect water to the trailer and, with the help of the District TB Coordinator, was able to arrange installation of a window air-conditioning unit. Managing this same patient required much coordination, not only with the TB agencies mentioned earlier, but between the local hospital, a local physician, and the staff at a VA hospital, to get him treated.

What lessons have we learned from Clinton County? When an outbreak like this occurs in an area with very limited knowledge of and resources for TB, it is crucial that higher level agencies respond immediately. Even though the first cases were reported in 1994, at that time it was not known that this strain of TB was so virulent and that the transmission rate was so high. This knowledge came to the forefront in 1995 during the contact investigation surrounding the index case who was working at the Tennessee clothing factory. Strains of *M. tuberculosis* from patients in this county and the surrounding counties are being sent to CDC for DNA fingerprint analysis to assess their relationship to the outbreak. Cases are still being identified that are related to the outbreak. Some of these cases could have been prevented if the interventions now being done with TB prevention had been in place at the beginning. We are still seeing a high number of individuals who are infected with TB. There remains much work to be done in Clinton County. With the collaboration and hard work of the agencies and individuals involved, perhaps by the new millennium, Clinton County will return to reporting zero cases annually.

—Reported by Marnell Kreschmer
Kentucky TB Control Program

Ten Against TB - Texas (Binational TB Campaign)

In 1995, the Texas Department of Health, in coordination with all ten U.S. and Mexican border states, began development of a Binational TB Elimination Campaign to address the rising incidence of TB in the U.S.-Mexico border region. As part of the campaign, the Texas Department of Health facilitated the signing of agreements between Texas and the states of Tamaulipas and Chihuahua to coordinate TB control activities. On February 7-8, 1996, the Texas Department of Health and the Mexican Consulate hosted a Binational TB Symposium in Austin at the Texas Medical Association to initiate the campaign. A Binational Project Coordinator was hired to implement the initiative and assigned to the TB Elimination Division of the Texas Department of Health. This initiative has officially become known as Ten Against TB (TATB).

Major players in the campaign met at the Austin symposium to build a consensus on a plan of action to promote the project and to solidify commitments for future activities. Support for the symposium was provided by the Texas Medical Association, the Mexican Consulate, the National Heritage Insurance Company, and Project Hope. The symposium was attended by high-level U.S. and Mexican health officials, including Dr. David Smith, former Texas State Commissioner for Health; Dr. Philip Lee, Assistant Secretary for Health, U.S. Public Health Service; Dr. Federico Ortiz Quezada of the Secretaria de Salud de Mexico; Dr. Dixie Snider, Associate Director for Science, CDC; and Dr. Ken Castro, Director, DTBE. Representatives also attended from the 10 health departments of California, New Mexico, Arizona, and Texas on the U.S. side of the border, from Tamaulipas, Nuevo Leon, Chihuahua, Coahuila, Sonora, and Baja California on the Mexican side, and from the Pan American Health Organization. Private-sector groups represented included the Texas Medical Association, the American Lung Association of Texas, Project Hope, the Border Trade Alliance, Rotary International, and NHIC. Administrative support continues to be provided by the Texas Department of Health, and technical support comes from local, state, federal, and binational entities.

Currently, TATB represents an international work group comprised of the U.S.-Mexico border states to act as a catalyst for actions to eliminate TB in that region with the participation of the public and private sector and community-based organizations. Its purpose is to reduce TB on the border by identifying and addressing the opportunities and challenges to TB elimination that cannot be effectively addressed by either nation alone. Membership consists of state health officers from the six Mexican border states (Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, Sonora, Baja California), and four U.S. border states (Texas, New Mexico, Arizona, and California) and includes representatives from public health–minded organizations in the public and private sector and community-based partners. A Binational Planning Council was also created to plan future endeavors to be undertaken by the campaign. Dr. William “Reyn” Archer, Commissioner of Health for the State of Texas, and Dr. Lourdes Quintanilla, Commissioner of Health for the State of Coahuila in Mexico, currently serve as co-chairpersons of TATB.

The general goals of TATB are:

- Support for the State-to-State Agreements (Binational TB Projects)

Support for these agreements between border sister states has permitted the sharing of epidemiological information and facilitated tracking of patients and access to laboratory equipment and pharmaceuticals. Functioning agreements already existed between Tamaulipas and Texas and between Chihuahua and Texas but resources were scarce. TATB has been working to alleviate that problem.

Internet Communication Project:
The possibility of facilitating communication through the use of the Internet is being explored. The Internet would link all 10 border state health officers and sister-city health officers in a communications network. The campaign will seek the means of providing all the necessary hardware and software, technical assistance, and training to operate and maintain the equipment, as well as a bilingual TB Web site to transmit campaign information, databases, mailing lists, and articles/publications.

Provider Education:
Educational efforts will focus on U.S. and Mexican health care providers to elevate their awareness of TB symptoms and treatment protocols, particularly regarding the management of drug-resistant TB cases.

Public Education Campaign:
This long-term campaign will primarily target the high-risk population but will also address the general population by raising TB awareness.

Specifically, TATB strives to make improvements in six other major technical areas:

- Cross-border TB case management tracking
- Universal use of directly observed therapy
- Increased numbers of contact investigations performed
- Enhanced laboratory capability
- Provider education
- Improved communications among all 10 border states

The TATB agenda is an ambitious one. Participants in TATB from both sides of the border have had to develop an appreciation for and understanding of the different approaches to TB control in each country. With 10 states to consider, there are also issues surrounding the equitable distribution of resources with optimal effectiveness. Decisions concerning the allocation of resources have sometimes been driven by priorities that may differ in the two countries and the capabilities of state and local programs. The issues are of a complex nature and the challenges TATB faces are significant. During the past year, its accomplishments included the following:

- Finalized work on its structure and organization
- Completed a survey of state laboratories on the U.S. side of the U.S.-Mexico border
- Identified “recyclable” laboratory equipment for export to Mexican border states
- Facilitated funding support for a TB-HIV screening project in the El Paso/Ciudad Juarez border area
- Facilitated a laboratory quality assurance pilot project with CDC in the Texas-Coahuila border area
- Negotiated the creation of a mechanism for transferring technology through Mexican Customs
- Developed a partnership with the Association of State and Territorial Public Health Laboratory Directors

(ASTPHLD) to provide training for Mexican laboratory technicians in more effective and efficient laboratory techniques

More recently, a grant of $150,000 was awarded to TATB by the Health Resources and Services Administration (HRSA) and is being used to purchase microscopes for 20 public health laboratories along the border and in the six state laboratories in the Mexican border states. Funds allocated by HRSA to TATB have also been used to train Mexican health care workers in the use of the DOT strategy, which has been officially adopted as a primary component of TB programs in Mexican border states where it is identified by the acronym "TAES."

A joint project between the Migrant Clinicians Network (MCN) and Project Hope is also underway to develop a manual to be disseminated among clinicians on both sides of the border for the management of binational TB patients. Project Hope is funding this effort. The manual will compare systems of care in both countries and will examine the unique characteristics that present special challenges for the elimination of TB on the border. A section of the manual will focus on the human factor affecting persons with TB by including the intimate experiences of actual binational patients, rather than concentrating solely on the technical aspects of treating the disease. The two persons directly responsible for creating and distributing the manual are Ms. Deliana Garcia, Binational Projects Coordinator for MCN, and Mr. Alberto Colorado, Program Director, Project Hope. Mr. Colorado has been reassigned from San Jose, California, to Laredo, Texas, where Project Hope recently established a regional office for the U.S.-Mexico border.

On May 5, 1997, a Memorandum of Understanding was signed in Mexico City between the United States and Mexico in which the two countries agreed to address common health problems adversely impacting the health status of people along the border. In a jointly signed statement, the Secretary of Health of Mexico, Dr. Juan Ramon de la Fuente, and the Secretary of the Department of Health and Human Services, Dr. Donna E. Shalala, declared their support for the Ten Against TB Initiative and recognized it as a model of binational action to address public health issues of shared concern on the border. The two leaders agreed to promote and encourage state health officers on both sides of the border to commit themselves to working collaboratively within the framework of TATB to strengthen TB prevention and control efforts and to reduce TB morbidity and mortality on the border. TATB was recognized for:

- Its contribution to increasing awareness and support by high-level public health and political officials from both countries for TB control efforts on the border
- Creating a better understanding of the issues and challenges and unique problems the border presents in developing an effective TB control program in the region
- Working to increase trust and willingness by both sides to work together to find solutions to complex problems
- Mobilizing funds for border TB control efforts

—Reported by Gene Tamames, PHA, Binational Projects Consultant, and Annette Riggio, Program Manager Ten Against TB TB Elimination Division Texas Dept. of Health

NEW DTBE HOME PAGE

The Communications and Education Branch (CEB), DTBE, is pleased to announce the posting of DTBE's reformatted Internet Web site. The new Web site, the result of much hard and expert work by Maria Fraire and Ingmar Ott, can be viewed at http://www.cdc.gov/nchstp/tb/ and includes many new features, such as the following:

- Slide sets that can be viewed and downloaded, including:
  - 1997 surveillance data
  - *Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Facilities*
  - *Controlling TB in Correctional Facilities*
- Quick guide to TB-related *MMWR* topics
- Quick guide to major TB guidelines including ATS/CDC guidelines
- Calendar of upcoming events

You will need Adobe Acrobat to view and download these documents. Future plans for the Web site include reformatting the fax sheets and *TB Notes,* and developing an on-line publication ordering system. If you have any specific comments about the usefulness or the layout of the home page, please contact Maria at (404) 639-5317. We will continue to make modifications as we get feedback from users.

—Reported by Chris Hayden
Division of TB Elimination

UPDATE ON OSHA STANDARD

OSHA published a proposed TB standard in the *Federal Register* on October 17, 1997. There was an extended comment period; anyone wanting to provide oral testimony had to inform OSHA in writing by the end of February. The hearings in Washington, DC, began on April 7. In the morning, OSHA staff presented their current position on the standard, including their sincere openness to revising the standard if constructive comments with appropriate data to support them are provided, as well as their realization that some of the elements in the proposed standard are likely to need revision (such as the 6-month testing requirement for all those entering isolation rooms.)

In the afternoon, Dr. Linda Rosenstock, the director of NIOSH, read the introduction to the CDC-submitted comments; then about eight staff from NIOSH and other parts of CDC participated in a panel to answer questions from the audience and from OSHA. It was a positive, constructive meeting, and there was a cooperative, "willing-to-revise" (with appropriate supporting data) approach presented by the OSHA leadership.

Testimony in DC concluded in April. Hearings were held in Los Angeles and in New York City in May, and in Chicago in June. The contentious issues appear to be 1) the inclusion of homeless facilities in the standard at all, 2) the requirement for 2-step testing at baseline, 3) the recommendation for 6-month testing for all persons entering isolation rooms, and 4) the perceived lack of flexibility compared to the CDC guidelines, among others. Some testifiers still argue for no standard, whereas the unions are arguing for much broader application and higher levels of protection.

In June, OSHA opened a posthearing comment period, which is limited to those who participated in the public hearings. Comments may now be filed until September 4. OSHA reopened the

comment period owing to stakeholder requests and to comments from TB hearings held by the agency. The original comment period ended February 17. The agency also expects to present findings from a preliminary study on homeless shelters by September 4. The study—covering OSHA site visits to nine homeless shelters—is being conducted to determine what percentage of the homeless would meet OSHA's criteria for a suspected infectious TB case. It will also examine the economic impacts of the standard for homeless shelters. The agency was originally expected to release the study at a June 4 TB hearing in Chicago but the data compilation is taking a little longer than expected.

—Reported by Pattie Simone, MD
Division of TB Elimination

The Impact of Managed Care on TB Control and Prevention: Results of a National Survey

This study was done in collaboration with the National TB Controllers Association and was conducted in the fall of 1997. The purpose of the study was to develop a picture of the impact that managed care has had on TB control programs to date and to gather information about the ways in which these TB programs are changing, and may need to change, in order to deal effectively with the new issues brought about by managed care.

A mail survey was developed and sent to the TB controller in each state and to TB program managers in 41 cities and counties. Surveys returned by state TB controllers and program managers from the 10 large cities with which CDC has cooperative agreements were included in the initial analysis. The survey was divided into the following sections: Medicaid and TB control, relationships between managed care organizations (MCOs) and health departments, overall effect of managed care on TB control, and training and assistance needs. We received completed surveys from 39 state TB controllers and from eight city TB program managers, for a response rate of 78% (n=47). The states represented in the analysis include many of the areas in the United States with the highest TB morbidity, as these states accounted for 87% of the reported cases of TB in the United States in 1996.

Below is a summary of key points from the study:

- Health departments are still acting as the traditional provider of TB clinical services in most areas of the country represented in the study (29/47, 62%).

- In some areas, however, managed care has changed the way in which TB clinical services are being delivered (18/47, 38%). Examples of these new arrangements include MCOs as providers of clinical services to their enrollees with TB, health departments acting as members of MCO provider networks, and health departments acting as non-network, fee-for-service providers to MCOs.

- Health departments are providing the majority of public health services for TB patients who are enrolled in MCOs (see Figure 1).

- MCOs are using their own or other private laboratories to process TB specimens (21/44, 48%), rather than state laboratories (10/44, 23%). Thirteen respondents (29%) did not know what laboratories are being used by the MCOs in their area to process

specimens.

- In many areas, health departments are not being consistently reimbursed for providing TB services to patients with private insurance coverage or Medicaid coverage. (see Figure 2.)

- Most respondents were not able to report definitively on the number of TB patients in their area who are enrolled in MCOs. Only 28 of 47 programs (60%) provided a response to this survey item and of these, 20 of 28 (71%)` indicated that their response was an estimate.

These results provide information about the degree to which managed care has had an impact on TB control and about the specific issues that TB control program staff and CDC need to consider. While managed care has not yet affected every part of the country, some areas, and particularly some areas with high TB morbidity, have been significantly affected. In a few states, MCOs are providing clinical services to enrollees with TB, and in some states, health departments have entered into financial and organizational arrangements with MCOs. As states continue to institute mandatory Medicaid managed care programs, the impact of managed care on TB control will continue to increase.

Managed care is affecting TB control programs in a variety of ways. For instance, TB control program staff may no longer be able to rely on established networks and relationships with other parts of the public health system. Many MCOs are using their own or other private laboratories, rather that state laboratories, to process TB specimens. MCOs are also supplying medications for their enrollees with TB in some areas. Having TB patients obtain their medications through health departments has been an important method of ensuring that the patients are brought into the public health system and that appropriate treatment is being rendered and contact investigations are being conducted.

The findings from this survey suggest that some TB programs need to expand the capacity to bill third parties for reimbursement for services provided. In addition, TB patients' "managed care status" and insurance status are variables that may be useful for inclusion in local and perhaps national surveillance systems. Currently, TB health officials are unable to determine how many of their patients are enrolled in managed care plans and thus cannot assess the impact of this form of health service delivery on key program indicators, such as treatment completion. Finally, TB program officials will need to continue to work with health providers in managed care organizations to ensure coordination of care of TB patients.

The Division of TB Elimination, in collaboration with the Office of Managed Care, Office of the Director, CDC, and with the George Washington University Medical Center's Center for Health Policy Research, has developed model contract specifications to assist health departments, State Medicaid Agencies, and MCOs in the development of written agreements to ensure the provision of quality patient and public health TB treatment, prevention, and control. These model contract specifications will be published in the October issue of *Clinical Infectious Diseases*.

—Reported by Nancy Eberle, MPH
Public Health Prevention Service Fellow
and Bess Miller, MD, MSc
Division of TB Elimination

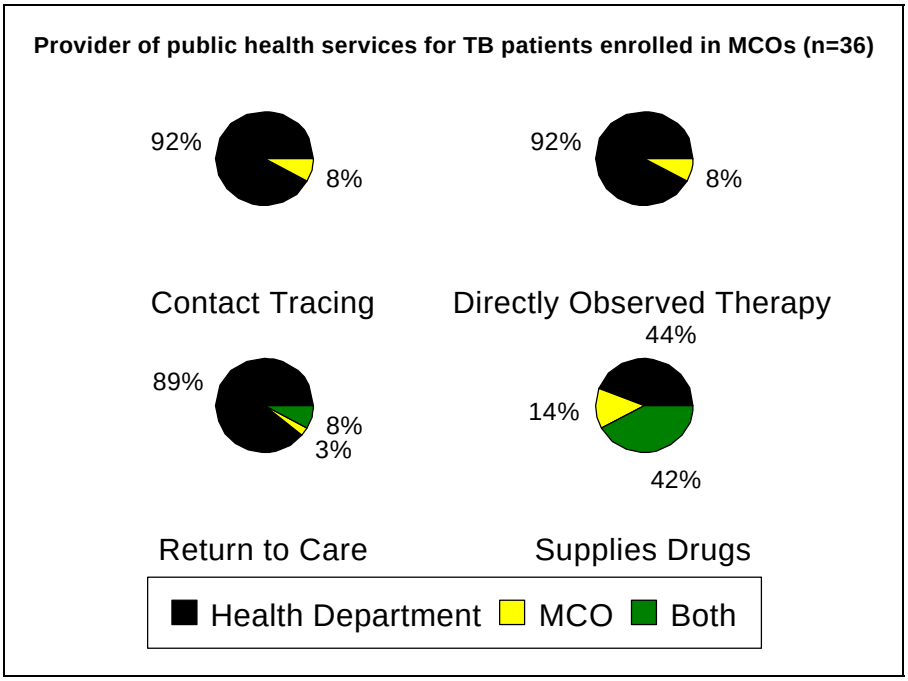

Figure 1

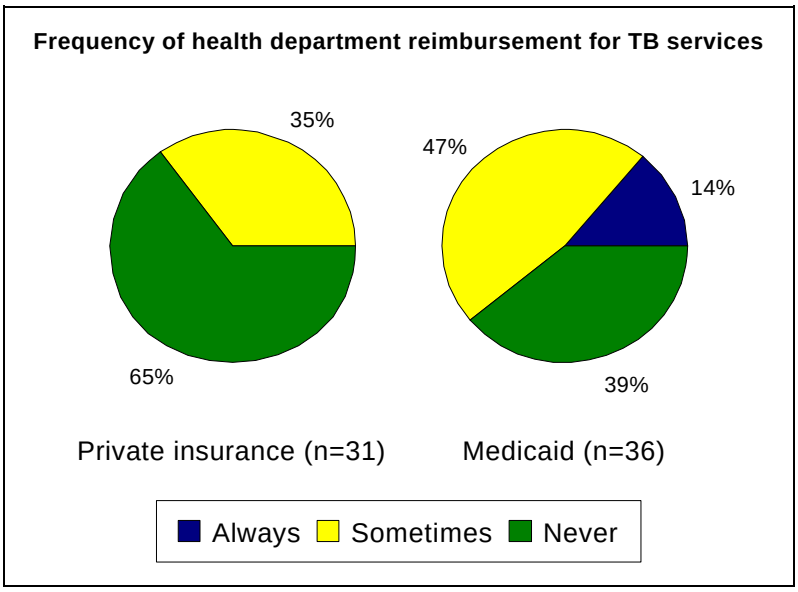

Figure 2

NCHSTP Reprint Services

On July 1, the National Center for HIV, STD, and TB Prevention's Office of Communications (OC) began coordinating a centralized article reprint service. This service will assist DTBE with distributing and tracking reprints of all new articles authored by division staff (in addition to selected back issues). All reprint requests received by DTBE's Communications and Education Branch will be sent to OC for distribution.

The reprint service offers many features, such as:

- Initial distribution to a list of constituents predetermined by the author;
- Fulfillment of requests sent to author or NCHSTP;
- Provision of monthly reports to the author and the division regarding numbers of requests received and who has requested reprints;
- Activities intended to "market" CDC publications to external partners:
    - A monthly list of articles will be placed on the NCHSTP Intranet and Internet
    - Routine mailings of monthly publication information will be sent (list of authors, etc.)
    - Media plans will be developed with the authors for articles that could generate media attention.

—Reported by Maria Fraire
Division of TB Elimination

UPDATES FROM THE RESEARCH AND EVALUATION BRANCH

Priftin® (Rifapentine) Approved by the FDA

In June of this year, the Food and Drug Administration (FDA) granted accelerated approval of the new TB drug, rifapentine, for the treatment of pulmonary TB. This is the first drug approved for a TB indication in the United States in over 25 years. Rifapentine is a long-acting rifamycin derivative with activity similar to rifampin. However, its long half-life provides for more widely spaced intermittent therapy than does rifampin.

Approval was based on preliminary results from a study conducted primarily in South Africa by the manufacturer of the drug, Hoechst Marion Roussel (HMR). In this study, patients with newly diagnosed, drug-susceptible pulmonary TB received daily isoniazid, pyrazinamide, and ethambutol, together with either daily rifampin or twice-weekly rifapentine, for 2 months. After completion of the initial phase, those in the rifapentine arm were given once-weekly rifapentine with isoniazid and those in the rifampin arm twice-weekly rifampin with isoniazid for an additional 4 months.

At 6 months after completion of treatment, 71% of those in the rifampin arm and 70% of those in the rifapentine arm had successful outcomes. Nonsuccessful outcomes were as follows:

HMR South African Study of Rifapentine

	Rifapentine arm (n=286)	Rifampin arm (n=284)
Failed entry	1	0
Discontinued (pt initiated)	31	34
Discontinued (MD initiated)	2	3
Adverse events	6	7
Failure	1 (0.3%)	8 (2.8%, 5 bacteriologic/3 clinical)
Relapse	25 (8.7%)	11 (3.9%)
Other	9	9

The relapse rate in the rifapentine arm is higher than expected. However, in detailed analysis of the relapse cases, it was found that patients in the rifapentine arm who were compliant with the drugs given daily during the initial phase and who achieved bacteriologic conversion of sputum at 2 months had a low relapse rate comparable to that in the control arm.

Adverse events were infrequent and similar in both arms. No serious or life-threatening toxicity was seen. However, an increased number of those in the rifapentine arm had hyperuricemia. Male gender, baseline severity of disease (cavitary disease and total area of cavities), and noncompliance with daily isoniazid, pyrazinamide, and ethambutol during the initial phase were all significantly associated with relapse and all were more common in the rifapentine arm.

Rifapentine will be marketed as Priftin® and available as 150-mg tablets. The usual adult dose is 600 mg twice weekly during the initial phase of treatment and once weekly during the continuation phase. In the initial phase, the companion drugs (isoniazid, pyrazinamide, and either ethambutol or streptomycin) should be given daily. During the continuation phase, rifapentine is given once weekly with isoniazid.

The FDA-approved indications for rifapentine's use stress the importance of full compliance with therapy to ensure rapid bacteriological conversion of sputum and to protect against relapse. At this time, rifapentine given once weekly in the continuation phase is not recommended for patients with HIV infection. This cautionary note is based on the findings from CDC's TB Trials Consortium (TBTC) Study 22, which found a high rate of relapse with acquired rifampin monoresistance in HIV-infected patients who received once-weekly rifapentine-isoniazid in the continuation phase of treatment.

Once-weekly regimens offer the important programmatic advantage of decreasing significantly the number of patient encounters required for completion of directly observed therapy. The HIV-negative arm of CDC's TBTC Study 22 is still ongoing, and outcome results will not

be available for more than a year. CDC expects to issue recommendations on the use of rifapentine after the results of TBTC Study 22 are available.

In July, REB hosted an informal consultation on rifapentine to review recent clinical and laboratory data and help plan further TBTC studies to determine the optimal use of the drug, especially in patients with HIV infection. Participants included professors Denny Mitchison and Jacques Grosset, internationally renowned TB researchers. Representatives from Hoechst Marion Roussel (which manufactures rifapentine), the FDA, the IUATLD, WHO, the TBTC, and the NIH TB Research Unit also took part in the meeting. It is expected that the TBTC will work closely with HMR and FDA on these new studies. In November at the meeting of the IUATLD in Bangkok, REB will sponsor a workshop on rifapentine with the objective of fostering collaboration with international partners in this work.

For further information on rifapentine, contact the Research and Evaluation Branch at (404) 639-8123.

—Reported by Rick O'Brien, MD
Division of TB Elimination

ATS/CDC Meeting on TB Screening and Preventive Therapy

The results of a number of "short-course" TB preventive therapy studies implemented during the past decade are now available. Collectively, the findings from these trials, all of which enrolled HIV-infected patients, suggest that rifampin-containing regimens of 2-3 months' duration may be suitable alternatives to longer courses of isoniazid. There are also data from some of these studies indicating that twice-weekly therapy with either isoniazid or rifampin/pyrazinamide is effective.

In order to critically review these studies and update the American Thoracic Society (ATS)/CDC guidelines on preventive therapy, CDC and ATS are sponsoring a meeting in Atlanta on September 14-15. Because of the close relationship between preventive therapy and screening, we will also examine our current guidelines on screening persons for TB infection. In addition to questions of safety and efficacy for these new regimens, we will also consider programmatic/operational issues and questions of cost-effectiveness/risk-benefit (especially related to isoniazid preventive therapy). We anticipate that a new ATS/CDC statement on TB screening and preventive therapy will result from this meeting.

—Reported by Rick O'Brien, MD
Division of TB Elimination

INTERNATIONAL NOTES

Summary Report on 1997 Training Courses Held in Micronesia

In November 1997, the Francis J. Curry National TB Center (CNTC) conducted two training courses on TB in Micronesia. CDC funds the CNTC, a joint project between the San Francisco Department of Public Health and the University of California, San Francisco. Cosponsors for the Micronesia courses included the American Thoracic Society (ATS); the Asian Pacific Nurse Leadership Council; the College of Nursing, University of Guam; the Department of Public Health Services, Commonwealth of the Northern Mariana Islands; the Hawaii Lung Association; the Ministry of Health and Environmental Sciences, Republic of the Marshall Islands; the Office of Pacific Health and Human Services, U.S.

Department of Health and Human Services; and the Pacific Basin Medical Association.

Most lectures for the course were given by Gisela Schecter, MD, MPH, and Charles Daley, MD. Typical of the Center's standard TB Intensive courses, presentations included information on transmission, diagnosis, treatment, screening, environmental control, preventive therapy, multidrug-resistant TB, pediatric TB, and HIV-related TB. Both Drs. Schecter and Daley have had significant international experience, including Dr. Schecter's 2 years of clinical practice in American Samoa and Dr. Daley's frequent onsite research in Tanzania.

The courses were tailored as much as possible to local needs. In Saipan, CDC recommendations were used as a basis for diagnosis and treatment protocols covered in the course, with the CDC *Core Curriculum on Tuberculosis*, as well as the CDC/ATS "Treatment of Tuberculosis and Tuberculosis Infection in Adults and Children," distributed to course participants. In Majuro, the World Health Organization's (WHO) guidelines were emphasized in lectures and lecture outlines; the WHO's recently published *DOTS* booklet was also distributed. Locally-based physicians in each location presented lectures on region-specific epidemiology of TB and strategies of TB control. In Saipan, Artin Mahmoudi, MD, FCCP, and Jon Bruss, MD, MSPH, served as local faculty; in Majuro, Kennar Briand, MBBS, and Alan Talens, MD, presented the region-specific lectures.

The first training was held in Saipan, the Commonwealth of the Northern Mariana Islands (CNMI), on November 5-7, at the Hyatt Regency Saipan Hotel. Forty-nine people attended: 37 participants were from Saipan; 5 participants came from two other islands in the CNMI, Tinian and Rota. In addition, there were four participants from Guam and three from Palau. Forty-eight of the participants work in the public sector, and 41 are clinicians. Course evaluations, submitted anonymously, were quite positive: on a scale of 1-10, with 10 being "most useful," the overall average course rating was 9.3. The clinicians who attended the course have a very high level of clinical training. Most of the participants work at the Commonwealth Health Center in Saipan, where the TB clinic has up-to-date equipment and a sound physical set-up for patient flow to reduce transmission risks.

Majuro, in the Republic of the Marshall Islands, was the site of the second training. Seventy people were in attendance at the Outrigger Hotel, November 12-14. Majuro Atoll accounted for 58 of the participants. Four others came from Kwajalein Atoll, with both Kwajalein and Ebeye represented, and one participant each from Alinglapalap and Jaluit Atolls. There were four participants at the course from the continental United States (Colorado, California, and New York) who had been working as volunteers for the Brookhaven National Laboratories program that provides care to Marshallese exposed to radiation during the atomic testing program in the Pacific. Sixty-eight of the participants work in the public sector. Although only 33 of the participants are considered clinicians under the conventional definition (doctors, nurses, physician assistants, and medical technicians), there was a large contingent of health assistants, who have primary responsibility for clinical care in the more remote areas of the Marshall Islands. The overall average course rating was 9.75.

Training locations were chosen according

to centrality of location and need, according to increasing rates of TB disease. Dr. Talens reported that in the meeting of the Pacific Islands Officers' Health Association in October 1997, TB was listed as "the number one concern of almost all the Pacific regions represented." In both the CNMI and in Majuro, as in most of the world, there was a dramatic rise in TB cases in the late 1980s. Both locations were in the midst of another sharp increase in cases at the time the trainings were held: using figures through October 1997, the CNMI had already seen a 35% rise in TB cases from 1996, and there had been a 28% increase in Majuro for the same 10-month period. In the CNMI, 64% of the individuals with TB disease were Asian/Pacific Islanders (non-Micronesian), with the remaining 36% made up of individuals of native Micronesian descent. In Majuro, 99% of the individuals with TB disease were native Micronesians. Both locations had seen few, if any, patients infected with both TB and HIV, but participants acknowledged that it was likely that this would change in the near future.

Many participants at both locations stressed the importance of getting CME credit for courses, as both location and delays in receiving course information make attendance at most CME courses difficult.

—Reported by Melissa Ehman,
Program Administrator
Francis J. Curry National TB Center

Civil Surgeon Training

Background: Each year approximately 500,000 foreign-born persons already living in the United States apply for adjustment of their status to become permanent residents. They must undergo a physical examination conducted by licensed physicians known as civil surgeons who follow specific CDC guidelines.

A half-day training session for civil surgeons was held in San Diego on May 30. The training was a collaborative effort between the district office of the Immigration and Naturalization Service (INS), San Diego County Health Department, Francis J. Curry National TB Center, the American Lung Association of San Diego and Imperial Counties, and the Division of Quarantine (DQ) of CDC. Training topics included the technical instructions for screening of TB, HIV, Hansen's Disease, syphilis and other sexually-transmitted diseases, and the new immunization requirements. Approximately 50 civil surgeons and 20 ancillary staff attended the training. The primary purpose of the training was to increase the knowledge and improve the performance of civil surgeons as they perform medical examinations on immigrants who are adjusting their status within the United States. Attendees also received instruction in the proper manner of completing the Medical Examination of Aliens Seeking Adjustment of Status form (I-693) and the Supplemental Form to the I-693 for required immunizations. Civil surgeons were tested for their knowledge of the technical instructions before and after the training. Dick Moyer and Paul Tribble represented DQ at the training session, and Rose Pray represented DTBE.

Participant Evaluation

Course objectives:

G Provide participants with an understanding of (1) current epidemiological trends in TB morbidity in the United States and the area; (2) theoretical basis and recommended methodology for diagnosing TB

infection and disease; and (3) services provided by the local health department and the reporting requirements for TB infection and disease.

G Provide understanding of current immunization requirements for those immigrants applying to adjust their immigration status within the United States.

G Provide understanding of the proper method of completing the Medical Examination of Aliens Seeking Adjustment of Status form (I-693) and the Supplemental Form to the I-693 for required immunizations.

The following information was obtained from the participant evaluation forms.

- *How well did the course meet these objectives:* 38 (90%) said very well, 4 (10%) said moderately.
- *How applicable is the content of this course to your work:* 36 (86%) said excellent; 6 (14%) said good.

- *Would you like to have this type of training on an ongoing basis:* 38 (90%) said yes; 1 (2%) said no; 3 (7%) did not check either yes or no.

- *If yes (would like to have this type of training on an ongoing basis), how often:* 15 did not specify how often; 8 said every 6 months; 7, once a year; 5, once every 2 years; a few indicated other frequencies, e.g., every 6-12 months, every 3 yrs, every 3-5 yrs, or every 4-5 yrs.

The course was highly rated by participants, with the overall quality of each session being rated between good and excellent.

—Reported by Paul Tribble
Division of Quarantine,
and Robert Cass
San Diego Co. Dept of Health TB Program

NEWS BRIEFS

The fourth National Health and Nutrition Examination Survey (NHANES IV) begins soon. These surveys, which began in the 1960s, are comprehensive studies that are conducted by the National Center for Health Statistics to gather important health data about the people of the United States in order to track U.S. health trends. NHANES IV, which began pilot testing in Washington, DC, in June, will survey 5,000 randomly selected Americans at 15 locations. The special significance of this survey for us is that this year, for the first time, tuberculin skin testing will be included in the exams and procedures that comprise the survey. We will provide a report on this process after the pilot testing has been completed.

TRAINING AND EDUCATIONAL MATERIALS

1997 TB Surveillance Data on the Web

Slide sets containing the 1997 TB surveillance data are available for viewing and downloading at DTBE's Web site. As described earlier in this newsletter, DTBE's reformatted Internet Web site, which can be viewed at http://www.cdc.gov/nchstp/tb/, includes many new features, such as:

- Slide sets that can be viewed and downloaded, including:
- Quick guide to TB-related *MMWR* topics
- Quick guide to major TB guidelines including ATS/CDC guidelines
- Calendar of upcoming events

§

New Guideline for Emergency Departments Available

The Institutional Consultation Services (ICS) of the Francis J. Curry National TB Center (CNTC) has developed the publication, *A Guideline for Establishing Effective Practices: Identifying Persons with Infectious TB in the Emergency Department.* The Guideline is targeted to emergency department managers, and infection control and employee health personnel.

The Guideline covers how to assess the risk for *Mycobacterium tuberculosis* transmission, implement TB triage practices, take appropriate actions once a suspect TB patient is identified, decrease the risk of *M. tuberculosis* transmission in the waiting room, and evaluate the effectiveness of the TB control measures in the emergency department. Included are easy-to-use worksheets, checklists, and "Cover Your Cough" signs. The Guideline can be downloaded and printed directly from the CNTC Web site: www.nationaltbcenter.edu

To request an order form for a printed and bound copy, contact:

Francis J. Curry National TB Center
3180 18th Street, Suite 101, San Francisco, CA 94110-2028
Phone: (415) 502-4600, Fax: (415) 502-4620

NEW CDC PUBLICATIONS

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PERSONNEL NOTES

William Stead, MD, retired as the TB Controller for Arkansas June 30, 1998. He had many outstanding accomplishments in his career, among them the fact that TB cases in Arkansas dramatically and persistently declined since he arrived there in 1973. He developed an enviable reputation for his abilities to successfully promote, lead, support, and advocate for effective public health actions related to TB. He has been particularly effective in encouraging the application of effective TB prevention and control practices and policies, and he taught many how to apply cutting-edge diagnostic, treatment, prevention, and control methodologies. He also served as a member of the first Advisory Committee for TB Elimination and played an all-important role there in helping to develop critical ACET statements, including the national TB elimination strategy and the ACET statements on prevention and control of TB in correctional institutions and nursing homes. As mentioned in the previous issue of *TB Notes,* Dr. Stead was the recipient of the first "Excellence in TB Control Award," which was given to him at the last National TB Controllers Workshop by the National TB Controllers Association in recognition of his many years of dedicated service to the elimination of TB.

Dr. Stead's long and distinguished career in medicine and public health is evident by his longstanding record of important publications and research. His research spans a 50-year period. His first publication, concerning salt depletion in hypertension, appeared in the *Journal of*

Clinical Investigations in 1948. He contributed very substantially to our understanding of pulmonary physiology through his early work with Frye and Ebert on the elastic properties of the lung. He developed a spirometer working with H. S. Wells that came to be used widely throughout the United States in most pulmonary function laboratories; this spirometer is called the Stead-Wells spirometer. His most important contributions have been in the field of TB. His work has covered almost all areas of TB in regard to treatment, pathogenesis, epidemiology, and prevention. He was one of the earliest to recognize and address the preventable and very serious TB-related problems in prisons and nursing homes. His research demonstrating the importance of TB control in nursing homes and showing how these outbreaks can be detected and controlled have received wide recognition, and although there are still problems in some areas, the problem of TB in these institutions is much improved owing to his personal efforts and leadership. In addition, his reports demonstrating genetic resistance to TB infection have received international attention. A review of his publication record shows that he remains productive, publishing in highly regarded journals. His creative thinking and productivity continue to the present time, as he is actively involved in TB research.

Dr. Stead has been recognized for his outstanding expertise and leadership for over four decades. He was elected to membership in the American Society for Clinical Investigations in 1956 and was elected President of the American Federation for Clinical Research in 1959. He was a member of the American Board of Internal Medicine Pulmonary Disease examining board and served as chairman of that board from 1963 to 1965. He was on the Editorial Board of the *American Review of Respiratory Disease* and the *Annals of Internal Medicine*. He received the Abernathy Award from the Arkansas Chapter of the American College of Physicians in 1983 and the James D. Bruce Award for outstanding contributions in preventive medicine from the American College of Physicians in 1988. He was awarded the Trudeau Medal from the American Thoracic Society in 1988. He is a Master of the American College of Physicians.

After his formal retirement, Dr. Stead will continue working with Dr. Joseph Bates, who will take his place. He will also continue attending teaching conferences and participating in TB research, and will remain on the faculty of the University of Arkansas in an Emeritus position. The University of Arkansas and the Arkansas Health Department will be truly fortunate to have Dr. Stead continue his important work with them.

Dr. Naomi Bock, who is an Assistant Professor of Medicine at Emory University School of Medicine and Clinical Consultant to the Georgia State Tuberculosis Control Program, has joined the Research and Evaluation Branch on a part-time basis. Dr. Bock received her doctor of medicine degree from the University of Washington and master of science degree from the Harvard School of Public Health. Dr. Bock's recent research has focused on TB in hospitals and prisons. In REB , she will be serving as a project officer for a number of clinical studies being conducted by the TB Trials Consortium.

Dr. Lisa Cairns has joined the Field Services Branch as a preventive medicine resident. Dr Cairns attended the University

of Guelph in Ontario and Yale University School of Medicine. She completed her family practice residency at Duke University and received her MPH from Johns Hopkins University. She recently completed the EIS program at the Washington State Department of Health, where she worked on a number of outbreaks, including a cluster of TB cases at a medical waste facility and TB lab reporting issues. She has also worked with CARE in Guatemala and the National Health Service Corps in the Marshall Islands, and conducted a special study with WHO in the Democratic Republic of the Congo. Dr. Cairns will be working mainly on a study of delays in completion of therapy. In addition she will be assembling chest x-rays for a clinical slide set and teaching file.

Mike Carson has made a career decision to depart from service with CDC and join ranks with the Public Health Department in Orange County, California. Mike joined CDC on February 7, 1993, as one of our founding Public Health Associates assigned to the New York City TB program. In January 1995, Mike was transferred to Orange County, California, to provide assistance with a major outbreak; he was promoted in July of that year. In January 1997, he was promoted to a position in the TB program in Tallahassee, Florida, where he has contributed, with Mark Fussell, and more recently with Grady Shepherd, to the recent successes in Florida. Mike is taking a position as senior epidemiologist for Orange County where he will be able to apply his skills learned in earning his masters in public health in epidemiology and biostatistics. His resignation was effective as of June 20, 1998.

George Cauthen, ScD, has left the division and has accepted a position in the Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion. George came to CDC in 1980 as the first EIS Officer in the division's history, and began working in the Surveillance and Epidemiology Branch. He remained in SEB for the 18 years he was in the division. He served as chief of the Epidemiology Studies Section from 1983 to 1986 and as chief of the Surveillance and Epidemiologic Investigations Branch from 1990 to1992. He was an author or coauthor in over 30 scientific papers on tuberculosis and was the division's preeminent tuberculosis epidemiologist. He was also the division's foremost expert on previous skin test studies. He was especially known for his wry sense of humor and his willingness and ability to teach young aspiring epidemiologists the intricacies of tuberculosis. He will be sorely missed. His last day in DTBE was May 20.

Dennis Christianson, who served as one of the three Program Coordination Officers during the 2-year NCHSTP Program Coordination Unit pilot project that recently ended, has now relocated to the National Center for Environmental Health. During the pilot project, he was responsible for coordinating the HIV, STD, and TB activities of NCHSTP for Los Angeles, Rhode Island, and Vermont.

Jackie Elliott has been selected for the vacant public health advisor position in the Philadelphia TB program. Jackie will function as the assistant to our senior public health advisor in the citywide TB program; specifically, she will be assigned as the Preventive Therapy Project Coordinator and will oversee screening and follow-up activities targeted to high-risk populations in the city. Jackie began her employment with CDC in February 1993 in New York City as a DTBE Public Health Associate I. During her tenure there, she

was assigned to various city TB program units, taking on increased activities and responsibility along the way. She was assigned to cosupervise a team of five public health advisors at the Harlem Model TB Center from April 1995 to June 1996. In April of 1996, she was promoted to Public Health Advisor. Her last position in New York was Cohort Coordinator for the Upper Manhattan Region which lasted until April 1997 when she was transferred to Los Angeles. In Los Angeles, Jackie was assigned to a team that reviews TB cases in the city. Her duties also include monitoring surveillance activities and managing the x-ray mobile screening unit. Jackie will begin her duties in Philadelphia on August 30, 1998.

Nick Farrell served as one of the three Program Coordination Officers during the 2-year NCHSTP Program Coordination Unit pilot project that recently ended and was responsible for program consultation and technical assistance for HIV, STD, and TB in three areas: San Francisco, Florida, and South Carolina. Nick is now with the CDC Office of Global Health.

Lisa Fitzpatrick, MD, joined the division in the Surveillance and Epidemiology Branch as an EIS Officer on July 1. She will be assisting with epidemiologic investigations and related assignments. Lisa started her EIS assignment with the Epidemiology Section of SEB on July 1, 1998. Lisa comes to us from the National Jewish Center for Immunology and Respiratory Medicine.

Michael Fraser has been selected for the vacant TB public health advisor position in the Fulton County (Atlanta) TB Control Program. Mr. Fraser came to work for CDC as a public health advisor in the Miami, Florida, STD control program in 1990. In May of 1993 he joined DTBE and was assigned to the New York City TB control program. In New York City, Mr. Fraser was assigned to the Brownsville Chest Clinic in Brooklyn as a clinic manager, was later assigned to the Richmond County TB program on Staten Island, and most recently was the NYC coordinator for HIV counseling and testing activities, which includes responsibility for 11 TB clinics. He was also involved in training activities. Michael transfers from NYC to Atlanta on August 31, 1998.

Mark Fussell is being detailed on a lateral assignment to WHO's Global Tuberculosis Programme to assist in the development of a TB Global Action Plan. DTBE interviewed members of the International Experience and Technical Assistance (IETA) program (Mark is one of the members) and selected Mark for the assignment. We are pleased to have Mark represent the division in this important endeavor.

Reuben Granich, MD, has left the division. Reuben came to DTBE in July 1996 as an EIS Officer and worked in the International Activity. He has been accepted into the CDC preventive medicine residency program, and will be obtaining an MPH at the University of California at Berkeley. He hopes to complete his MPH in June, 1999, and will then spend the practicum year of the residency with the California Health Department.

Fred Heer, director of North Dakota's Division of Disease Control, retired May 5. He served as the state’s TB Controller for a number of years after leaving CDC in 1974. He originally started with CDC in 1962 as an STD assignee to Los Angeles. He was later reassigned to New Orleans (STD); he then moved as a CDC TB program

assignee to Dallas and in 1965 to Bismarck, and stayed there for the remainder of his public health career. He resigned from CDC in 1974 to become an employee of the North Dakota Department of Health.

Cheyenne Isom, one of DTBE's public health advisors currently assigned to the New York City TB control program, will be resigning from CDC as of September 5, 1998. He has decided to continue his education full time. Cheyenne came to work for CDC and DTBE in February 1993 in New York City as a member of the Division's new Public Health Associate field staff development program. In the 5½ years Cheyenne worked in the TB program, he trained in the various program specialty units and gained much experience, knowledge, and many skills. During the period, he was given lead responsibility for the work of a number of local public health advisors. In 1995 Cheyenne was promoted and began his current special assignment as lead PHA at the Rikers Island Correction Unit. We wish Cheyenne the best in his future endeavors.

Margaret Jackson has joined REB as a program specialist. Margaret began her CDC career in 1988 in the Center for Environmental Health. She came to DTBE from the National Center for Chronic Disease Prevention and Health Promotion where she was a budget analyst. In REB Margaret will serve as the Executive Coordinator of the TB Trials Consortium (TBTC) Steering Committee, overseeing a variety of TBTC administrative activities.

Ken Johnson has been selected for a new public health advisor position in the New York City TB control program. He will serve as a special projects coordinator and program development associate in the Strategic Initiatives Unit. His responsibilities will focus on developing relationships with agencies and organizations outside the TB program. Ken began his career with CDC in 1990 as a DSTD disease intervention specialist (DIS) in Chicago. In that assignment and a subsequent one in Raleigh, NC, he developed and fine-tuned his interviewing, counseling, and case management skills. In January 1993 he joined DTBE in New York City. In September 1994, he was given the responsibility of supervising 15 local PHAs. He assigned work, participated directly and indirectly in training, established work standards, and evaluated overall performance. Ken is familiar with the New York City TB program and with the medical community as well. This first-hand knowledge is an important factor in being successful in dealing with the managed care and other health-related entities in the city. Ken's new assignment became effective on May 24, 1998.

Lauren Lambert is currently on a temporary assignment to the TIMS project for 50% of her time. She is the acting TIMS Assistant Project Manager. Her duties include acting as the liaison for the National Electronic Telecommunication System for Surveillance (NETSS), coordinating some help desk functions, documentation review, specification writing, software testing, and similar functions.

Dr. Mark Lobato has accepted a medical officer position in the Field Services Branch. Dr. Lobato received his medical degree from UCSF where he also completed his pediatric residency. He completed the EIS program in the HIV/AIDS division, Epidemiology Branch, Pediatric and Family Studies, in 1992-1994. He was a preventive medicine resident in the California State TB program in 1994-1995

where he characterized missed opportunities to prevent TB and developed a state policy for skin testing children. He completed an infectious disease fellowship with the Department of Pediatrics at UCSF in 1995-1997, during which time he also worked at the Francis J. Curry Model Center, where he gained additional clinical and programmatic experience in TB. For the past year, Dr. Lobato has been working in the HIV Surveillance Branch, Reporting and Analysis Section. He transferred to FSB in August and will be working mainly on program evaluation activities, working closely with the program consultants and TB programs, and conducting special studies with an emphasis on program evaluation in collaboration with other branches in the division.

Shahin Lockman, MD, has left the division, where she worked in the International Activity. She came to the division in July 1996 as an EIS Officer and worked with the BOTUSA TB Project. She has begun a 3-year infectious disease fellowship program at the Massachusetts General–Peter Bent Brigham Hospital program in Boston. She was married last month to Roger Shapiro, a fellow EIS Officer who will also be completing his infectious disease fellowship in the same hospital.

Cynthia Marshall has resigned from CDC in order to attend divinity school. Cynthia served as one of the three Program Coordination Officers during the 2-year NCHSTP Program Coordination Unit pilot project that recently ended, and was responsible for program consultation and technical assistance for HIV, STD, and TB in three areas: Texas, Houston, and the District of Columbia.

Louis Salinas is now serving as the NCHSTP liaison with the U.S. Agency for International Development. He was the chief of the PCU during the 2-year pilot project, supervising the activities of the three Program Coordination Officers Cynthia Marshal, Nick Farrell, and Dennis Christianson.

Mona Saraiya, MD, MPH, has left the division. Mona served as a staff medical epidemiologist with the International Activity beginning in July 1997. She worked on several projects related to TB among foreign-born persons. She is now working on skin cancer projects in the Cancer Division, National Center for Chronic Disease Prevention and Health Promotion.

Susan Scott has joined the Surveillance and Epidemiology Branch as a secretary. She began working here in July 1998.

Joyya Smith, a June graduate of Georgia Southern University with a bachelors degree in psychology, is back for her third summer in the Field Services Branch. She is working on a variety of projects and activities and providing back-up for the program operations assistants.

Elizabeth Talbot, MD, joined DTBE in July 1998 as an EIS Officer in International Activities. She is a graduate of Mt. Holyoke College and the Robert Wood Johnson Medical School of the University of Medicine and Dentistry of New Jersey. She completed an internship in medicine and psychiatry at the University of Iowa, and subsequently completed a medicine residency and infectious disease fellowship at Duke University. She has worked in a number of developing countries prior to joining EIS. During her 2 years, she will be working on a variety of projects at the DTBE field site in Botswana and in other international projects in the Division.

Jordan Tappero, MD, MPH, has left DTBE after working with the Division over the past 3 years as a staff epidemiologist in the International Activity. He worked on a number of international projects involving methods for improving TB diagnosis in developing countries. He is now working as a section chief in respiratory special pathogens in the Meningitis and Special Pathogens Branch, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, as of June 1998.

Tonya Thrash has been selected as the new program operations assistant (OA) in the Office of the Director, the position that Annette Baird vacated. The International Activity (IA) is in the process of announcing Tonya's vacant position. Tonya will be assisting Carl Schieffelbein, Bess Miller, and John Seggerson.

Cindy Weinbaum, MD, has left the division. Cindy came to DTBE in July 1996 as an EIS Officer and worked with the Surveillance and Epidemiology Branch. Cindy recently completed her EIS assignment and accepted a preventive medicine residency with the Epidemiology Program Office. This year Dr. Weinbaum will be completing her masters degree in public health at Emory University.

Patrick Zuber, MD, finished his 1-year preventive medicine residency with the DeKalb County Health Department. Prior to this assignment, Patrick spent 3 years in the International Activity of DTBE, where he conducted a number of notable studies and initiated various projects and collaborations. He will now be working as an advisor on polio elimination with the National Immunization Program. He will be assigned to Burkina Faso in West Africa.

CALENDAR OF EVENTS

August 26-28, 1998
1998 International Symposium on TB Vaccine Development and Evaluation
San Francisco, California
For registration information: Jerry Koenig
Tel: (404) 633-9117
Fax: (404) 639-6311
E-mail: GKoenig@CMAorg.com

September 2, 1998
Use of Surveillance Data to Guide and Evaluate TB Control Programs Course
San Francisco, California
Training Coordinator
Francis J. Curry National TB Center
(415) 502-4600

September 11, 1998
TB Update II: Medical Management of TB - Protease Inhibitors and TB Medication Course
Newark, New Jersey
NJ Medical School National TB Center
Debra Jean Kantor
(973) 972-3273

September 14, 1998
Mantoux Tuberculin Skin Test Course
Newark, New Jersey
NJ Medical School National TB Center
Debra Jean Kantor
(973) 972-3273

September 24-27, 1998
38th Interscience Conference on Antimicrobial Agents and Chemotherapy
San Diego, California
Contact ASM, Meetings Dept.
Tel: (202) 942-9248
Internet: www.asmusa.org

October 2, 1998
Directly Observed Therapy (DOT): An Overview Course

Newark, New Jersey
NJ Medical School National TB Center
Debra Jean Kantor
(973) 972-3273

October 9, 1998
TB 101 Course
Newark, New Jersey
NJ Medical School National TB Center
Debra Jean Kantor
(973) 972-3273

October 12-16, 1998; February 15-19, 1999; April 19-23, 1999
Postgraduate Course on Clinical Management and Control of Tuberculosis
Denver, Colorado
National Jewish Medical and Research Center
Catheryne J. Queen
Tel: (303) 398-1700
Fax: (303) 398-1906

October 15-16, 1998
TB in the New Millennium: A Disease in Transition - The 5th Annual Northeast TB Controllers Meeting
Newark, New Jersey
For information, contact: Rajita Bhavaraju
(973) 972-4811

October 29-30, 1998
TB Intensive Course
Newark, New Jersey
NJ Medical School National TB Center
Debra Jean Kantor
(973) 972-3273

November 4-6, 1998
TB Intensive Course
San Francisco, California
Training Coordinator
Francis J. Curry National TB Center
(415) 502-4600

November 12-15, 1998
36th Annual Meeting of the Infectious Diseases Society of America
Denver, Colorado
Convention Management Resources
Tel: (800) 421-2499 (US and Canada)
(415) 979-2287 (international)
Fax: (415) 882-5493

November 15-19, 1998
126th Annual American Public Health Association Convention
Washington, DC
Anna Keller
Tel: (202) 789-5670
Internet: www.apha.org

November 18, 1998
TB Skin-Testing Workshop
San Francisco, California
Training Coordinator
Francis J. Curry National TB Center
(415) 502-4600

November 23-26, 1998
29th World Conference of the International Union Against Tuberculosis and Lung Disease
Bangkok,Thailand
The Anti-Tuberculosis Association of Thailand
P.O. Box 52 Samsennai, Bangkok 10400, Thailand
Tel: 011-662-270-1033; 011-662-279-1354
Fax: 011-662-271-1547; 011-662-271-3146
E-mail: atat@ksc.th.com

December 9, 1998
TB Update Course
San Francisco, California
Training Coordinator
Francis J. Curry National TB Center
(415) 502-4600